



TEACHER LEADERS THREE YEAR - PROGRAM PLAN

Year One – Plan & Expectations

- July 16-21, 2006 – Summer Institute – Foundations & Issues in Mathematics Education
BHSU Spearfish
- November 2006 – One and one half day Understanding Student Thinking in Numbers & Operations*
- January 2007 – One and one half day Understanding Student Thinking in Numbers & Operations*
- March 2007 – One and one half day Understanding Student Thinking in Numbers & Operations*
- **Expectation** – Teacher Leaders will establish a demonstration classroom, and by spring of 2007, they will invite other teachers in their building to observe their classrooms.
- Implement CGI in their classroom

This course will be provided regionally by the SD Counts Math Specialist and the project staff

* Understanding Student Thinking in Numbers & Operations is the first of two classes in in Cognitively Guided Instruction (CGI).

Year Two – Plan & Expectations

- Summer 2007 – Summer Institute-Algebraic Thinking for K-12 Educators
Eastern SD location to be determined
- November 2007 – One and one half day Understanding Student Thinking in Algebra *
- January 2008 – One and one half day Understanding Student Thinking in Algebra *
- March 2008 – One and one half day Understanding Student Thinking in Algebra *
- **Expectation** – Teacher Leaders will develop and implement a building-based professional development plan with the support of their regional Math Specialist. The professional development plan may include:
 - Teaching CGI classes for their building
 - Monthly study groups
 - Implementing and scoring performance tasks
- Continue to implement CGI in their classroom

This course will be provided regionally by the SD Counts Math Specialist and the project staff

*Understanding Student Thinking in Algebra is the second CGI course.

Year Three – Plan & Expectations

- Summer 2008 – Summer Institute – Geometry & Measurement for K-12 Educators
BHSU, Spearfish
- November 2008 – One and one half day Student Thinking in Geometry & Measurement training
- January 2009 – One and one half day Student Thinking in Geometry & Measurement training
- March 2009 – One and one half day Student Thinking in Geometry & Measurement training
- **Expectation** – Teacher Leaders will expand and continue to implement a building-based professional development plan with the support of your regional Math Specialist. The professional development plan may include but are not limited to:
 - Teaching CGI classes for their building
 - Teaching CGI algebra, geometry, and measurement classes
 - Monthly study groups
 - Implementing and scoring performance tasks

The Student Thinking in Geometry & Measurement course will be provided regionally by the SD Counts Math Specialist and the project staff

Optional Culminating Event

- Summer 2009 – Summer Institute – Leadership in School Mathematics

List of Classes

(2 credits each)

Foundations and Issues of Mathematics Education

Understanding Student Thinking in Numbers & Operations

Algebraic Reasoning for K-12 Educators

Understanding Student Thinking in Algebra

Geometry & Measurement for K-12 Educators

Understanding Student Thinking in Geometry & Measurement

Teacher Leaders who complete this coursework will receive a graduate-level academic certificate in mathematics education from Black Hills State University. By completing an additional 8 credits of coursework (outside of SD Counts), a Teacher Leader with advanced certification will qualify for South Dakota's new K-12 Mathematics Specialist Endorsement.